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NOTICE OF ALLOWANCE AND FEE(S) DUE

DAVIDSON BERQUIST JACKSON & GOWDEY LLP 4300 WILSON BLVD., 7TH FLOOR ARLINGTON, VA 22203

EXAMINER

ALEMU, EPHREM

ART UNIT PAPER NUMBER

2821 DATE MAILED: 03/02/2011

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 10/584,075 | 07/16/2008 | Hindrik Willem De Vries | 2602-0011 | 8763 |

TITLE OF INVENTION: METHOD OF AND ARRANGEMENT FOR REMOVING CONTAMINANTS FROM A SUBSTRATE SURFACE USING AN ATMOSPHERIC PRESSURE GLOW PLASMA

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 06/02/2011 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| appropriate. All further of indicated unless corrected maintenance fee notificated to the control of the contro | ed below or directed oth | ng the Patent, advance of the Patent, advance of the Patent, advance of the Patent in Block 1, by (| orders and notification of n (a) specifying a new corres | naintenance fees will epondence address; | Il be mailed to the current and/or (b) indicating a separate to the current and/or (b) indicating a separate to the current and the current an | correspondence address as arate "FEE ADDRESS" for |
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| DAVIDSON BERQUIST JACKSON & GOWDE 4300 WILSON BLVD., 7TH FLOOR ARLINGTON, VA 22203 | | | I he | reby certify that this | ficate of Mailing or Trans Fee(s) Transmittal is being th sufficient postage for fir Stop ISSUE FEE address O (571) 273-2885, on the de | emission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below. |
| | | | | | | (Depositor's name) |
| | | | | | | (Signature) |
| | | | | | | (Date) |
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| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 06/02/2011 |
| EXAM | INER | ART UNIT | CLASS-SUBCLASS |] | | |
| ALEMU, I | EPHREM | 2821 | 315-111210 | - | | |
| "Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME AI PLEASE NOTE: Unle | ess an assignee is ident n in 37 CFR 3.11. Comp | " Indication form ed. Use of a Customer A TO BE PRINTED ON ified below, no assignee | (1) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or type adata will appear on the port a substitute for filling and (B) RESIDENCE: (CITY) | vely, e firm (having as a r ugent) and the names rneys or agents. If n printed. be) atent. If an assigned assignment. | nember a 2 of up to o name is 3 e is identified below, the d | ocument has been filed for |
| Please check the appropri | ate assignee category or | | • , | | | oup entity 🗖 Government |
| 4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies | | | 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). | | | |
| a. Applicant claims | tus (from status indicates s SMALL ENT1TY statu | is. See 37 CFR 1.27. | ☐ b. Applicant is no long | ger claiming SMALI | L ENTITY status. See 37 C | FR 1.27(g)(2). |
| NOTE: The Issue Fee and interest as shown by the r | d Publication Fee (if requeecords of the United Sta | uired) will not be accepte tes Patent and Trademark | ed from anyone other than t k Office. | he applicant; a regist | ered attorney or agent; or th | ne assignee or other party in |
| Authorized Signature | | | <u>.</u> | Date | | |
| Typed or printed name | | | | = | | |
| This collection of information application. Confident submitting the completed this form and/or suggestion. | ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this bu | CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to the | on is required to obtain or r 1.14. This collection is est y depending upon the indiv ne Chief Information Office | etain a benefit by the imated to take 12 m idual case. Any con er, U.S. Patent and T | e public which is to file (and inutes to complete, including nments on the amount of ti- rademark Office, U.S. Dep | d by the USPTO to process) ng gathering, preparing, and me you require to complete artment of Commerce, P.O. |

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| 10/584,075 | 07/16/2008 | Hindrik Willem De Vries | 2602-0011 | 8763 | |
| 42624 75 | 90 03/02/2011 | EXAMINER | | | |
| DAVIDSON BERQUIST JACKSON & GOWDEY LLP 4300 WILSON BLVD., 7TH FLOOR ARLINGTON, VA 22203 | | | ALEMU, EPHREM | | |
| | | | ART UNIT | PAPER NUMBER | |
| | | | 2821 | | |

DATE MAILED: 03/02/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 251 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 251 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

| | Application No. Applicant(s) | | | |
|--|---|--|--|--|
| | 10/584,075 | DE VRIES ET AL. | | |
| Notice of Allowability | Examiner | Art Unit | | |
| | Ephrem Alemu | 2821 | | |
| The MAILING DATE of this communication appearance All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED or other appropriate commitmed GHTS. This application is | in this application. If not included nunication will be mailed in due course. THIS | | |
| 1. This communication is responsive to <u>02/07/2011</u> . | | | | |
| 2. 🛮 The allowed claim(s) is/are <u>1-29</u> . | | | | |
| 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM | been received. been received in Application cuments have been received of this communication to f | tion No ed in this national stage application from the | | |
| THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | VANUALEDIO AMENDMENT ANNOTICE OF | | |
| A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give | | | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mus | st be submitted. | | | |
| (a) \square including changes required by the Notice of Draftspers | on's Patent Drawing Revi | ew (PTO-948) attached | | |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date | | | | |
| (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date | | | | |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t | | | | |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | | | |
| | | | | |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material | 6. ☐ Interview Paper No 7. ☐ Examiner | Informal Patent Application Summary (PTO-413), b./Mail Date 's Amendment/Comment 's Statement of Reasons for Allowance | | |
| | /Jacob Y Cho Supervisory F | oi/ Patent Examiner, Art Unit 2821 | | |

Application/Control Number: 10/584,075 Page 2

Art Unit: 2821

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 02/07/2011 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent Nos. 7,791,281 & 7,399,944 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

- 2. Claims **1-29** are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

After further search and consideration of Applicant's amendment field on 08/24/2010, the primary reason for the allowance of the claim is the inclusion of the following limitation "applying an alternating plasma energizing voltage to said electrodes causing a plasma current and a displacement current, and controlling the displacement current during plasma generation for stabilizing the plasma such that modification of properties of said substrate surface is prevented" in a manner claimed in the independent claims 1 and 22 which are not found in the prior art references and further in light of the filing of a terminal disclaimer on 02/07/2011.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Page 3

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The

examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jacob Y Choi can be reached on (571) 272-2367. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EA

02/21/2011

/Jacob Y Choi/

Supervisory Patent Examiner, Art Unit 2821